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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,859	01/24/2002	Victor F. Petrenko	388506	2937
30955	7590	12/30/2004		
LATHROP & GAGE LC 4845 PEARL EAST CIRCLE SUITE 300 BOULDER, CO 80301				
			EXAMINER FASTOVSKY, LEONID M	
			ART UNIT 3742	PAPER NUMBER

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/057,859	Applicant(s) PETRENKO ET AL.	
	Examiner Leonid M Fastovsky	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4-7, 12-16, 19-20, 24-27 and 29-37 are rejected under 35

U.S.C. 102(b) as being anticipated by Shimada et al (JP411332074).

Shimada teaches a method and a system for melting ice, the system comprising an electrical conductor 5 disposed at a distance of about 0 to 30 cm from the ice; an AC power source 4 for providing a high-frequency voltage in the electrical conductor 5 that generated a high-frequency alternating electric field at the surface sufficient to melt ice at the surface, and the system component 2 functions as an electric sink.

A recitation "a cableway" directed to the manner in which a claimed apparatus intended to be used does not distinguish the claimed apparatus from the prior art- if the prior art has the capability to so perform. See MPEP 2114 and Ex parte Masham, 2 USPQ2d 1647 (1987).

As for claim 13, Shimada uses inherently the tower in order to connect power lines to it

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3742

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada in view of Wiseman et al (6,043,471).

Shimada teaches substantially the claimed invention, but is silent regarding 180 degree out of phase in AC system. Wiseman discloses a heating system with phase control in which Mosfet Q3 is 180 degree out of phase with respect to Mosfet Q2 (col. 6, lines 27-34). It would have been obvious to one having ordinary skill in the art to modify Shimada's invention to include AC power source with 180 degree out of phase to control the heating cycle as taught by Wiesman (col. 6, lines 20-34).

5. Claims 3, 9-10, 17-18, 25-26 and 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada.

Shimada teaches substantially the claimed invention including a frequency of 2350 MHz, but does not teach a voltage range, and an electrical ground. It would have been obvious to one having ordinary skill in the art to modify Shimada's invention to include a high-frequency range and a voltage range because a high-frequency range and a voltage range can be determined by the user having specific a desired result in mind, and also connect the system components to electrical ground as conventional in the art.

6. Claims 21, 27 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimada in view of Dey et al (4,409,428).

Shimada teaches substantially the claimed invention, but is silent about a second conductor and an insulator. Dey teaches a cableway tower 5, a plurality of conductors

Art Unit: 3742

1-4, and insulators 12-15 between conductors. It would have been obvious to one having ordinary skill in the art to modify Shimada's invention to include a second conductor as taught by Dey in order to diversify usage of the system and include an insulator in order to prevent a short circuit as taught by Dey.

Response to Arguments

7. Applicant's arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Allaire et al (6,018,152) and Ackerman (1,994,054).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 703-306-5482. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 703-305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

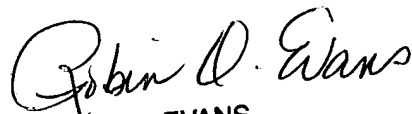
Art Unit: 3742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Leonid M Fastovsky
Examiner
Art Unit 3742

Imf

12/27/04


ROBIN O. EVANS
PRIMARY EXAMINER
12/27/04